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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,993

03/26/2004

John S. Fox

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9018

7590

06/22/2006

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EXAMINER

GAWORECKI, MARK R

ART UNIT

PAPER NUMBER

2884

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/810,993

Applicant(s)

FOX, JOHN S.

Examiner

Mark R. Gaworecki

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2884

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-13 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 3 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. The disclosure is objected to because of the following informalities:

A part of a sentence appears to be missing on page 2, line 21, which currently reads: "Nonetheless to all these variables of illumination, the fluorescent".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Sammak *et al.* (US 2005/0176056).

With respect to claim 1, the test plates of Sammak *et al.* comprise microbead regions (Figure 2) wherein under illumination, certain regions fluoresce more brightly than other regions (paragraph [0034]).

With respect to claims 2 and 6, the test plates of Sammak *et al.* comprise substantially planar substrates (polymeric layer, figure 2B), in which fluorescent substances (microbeads, figure 2B), are included and covered with a fluorescent coating (polymer doped with fluorophore, paragraph [0046], lines 11-13).

With respect to claims 4 and 5, Sammak teaches using a substrate comprising glass, plastic, or quartz (paragraph [0026]).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sammak *et al.* (US 2005/0176056), in view of Polak *et al.* (6,379,622).

With respect to claim 7, Sammak *et al.*, as applied to claim 1 above, uses test plates for calibrating a fluorescent imaging system, but fails to show the use of quantum dots. Polak *et al.* uses a quantum dot as a tool for the calibration of a fluorescent imaging system (column 9, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use quantum dots instead of microbeads for calibration of a fluorescent imaging system, as

quantum dots can be readily manufactured in various sizes in order to accurately produce emissions of specific wavelengths (Polak *et al.*, column 4, lines 13-19), which would be ideal for a calibration instrument.

***Allowable Subject Matter***

7. Claims 3 and 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 3, 8, 9 and 10, the test plates of Sammak *et al.*, as applied to claim 1 above, do not show uneven application of a coating applied to different regions in multiple steps, nor does it show the use of nickel chrome as a coating.

9. Claims 11-13 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 11-13, Sammak *et al.* (US 2005/0176056) teaches the use of microbead-based test plates for the calibration of a fluorescent imaging system, as applied to claim 1 above, but fails to show the adaptation of these plates to a system of macroscopic scale, wherein the device is used only for observation of microscopic and submicroscopic scales (paragraph [0024]). Further, Sammak *et al.* fails to show two illumination sources of different colors. The confocal scanning endoscope system of

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Mandella *et al.* (6,414,779) shows the use of two separate illumination sources of different wavelengths (column 7, lines 25-30) for illumination of a specimen, but fails to address the calibration device with a plurality of fluorescent regions wherein each fluoresces with differing brightness. It would not have been obvious to combine these two devices, as the device of Sammak *et al.* would not be adaptable to a macroscopic system, as specified by the applicant's claim 11.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,459,805 to Reynolds *et al.*


U.S. Pat. No. 6,369,928 to Mandella *et al.*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Gaworecki whose telephone number is (571) 272-8540. The examiner can normally be reached on Monday through Friday, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MG  
13 June 2006



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